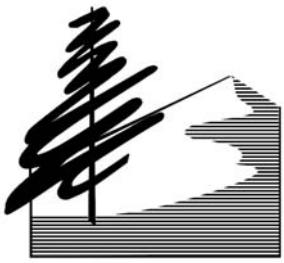
Carlsbad Oaks North
Habitat Conservation Area

(S034)

Annual Report
October 2006 - September 2007

Prepared for:
U.S. Fish and Wildlife Service
California Department of Fish and Game
City of Carlsbad

Prepared by:



Patrick McConnell
The Center for Natural Lands Management
215 West Ash Street
Fallbrook, CA 92028

November 2007

Table of Contents

List of Figures

List of Tables

I. Introduction

This report summarizes the management activities performed or overseen by the Center for Natural Lands Management (Center, CNLM) at the Carlsbad Oaks North Habitat Conservation Area (Preserve) during the management year beginning on October 1, 2006, and ending on September 30, 2007. The management items discussed below have been developed from the guidelines for goals and objectives set forth in Carlsbad Oaks North Annual Work Plan (CNLM 2006) and the Carlsbad Oaks North Habitat Conservation Area Preserve Management Plan (PMP) dated January 2005 (Tierra Data 2005).

The Preserve is comprised of four non-contiguous units separated north-south by the new extension of Faraday Avenue and east-west by the new extension of El Fuerte Avenue which ties into Faraday Avenue near the center of the Preserve. The Preserve is located in the east central portion of Carlsbad, northeast of the intersection of El Camino Real and Palomar Airport Roads (Figures 1 and 2).

The Preserve covers 326 acres, of which 108.4 acres are located within a conservation easement (CE) on lands owned by the County of San Diego. The CE was transferred to the Center in November of 2005. The Center received funds to manage the CE portion in May of 2006 at which time management activities commenced. The Center received fee title for the remaining 219.6 acres from the previous owner, Techbilt Construction Corporation (Techbilt), the developer of the Carlsbad Oaks North Business Park, in March of 2007. This Preserve is to be managed for the purpose of preserving sensitive biological resources and to meet the City's obligation to their Habitat Management Plan (HMP), and north San Diego County's Multiple Habitat Conservation Program (MHCP).

This represents the first annual report for this preserve in its entirety. A brief letter report was sent in December 2006 to City of Carlsbad, U.S. Fish and Wildlife Service, and California Department of Fish and Game (CNLM 2006) detailing the activities carried out on the CE portion of the Preserve during that partial year of management.

Management at the Preserve includes installing and maintaining fences and gates (capital improvements), biological surveys, habitat maintenance and restoration, public services, and reporting. Each of these activities and their fiscal year results are summarized below and fully described within this report.

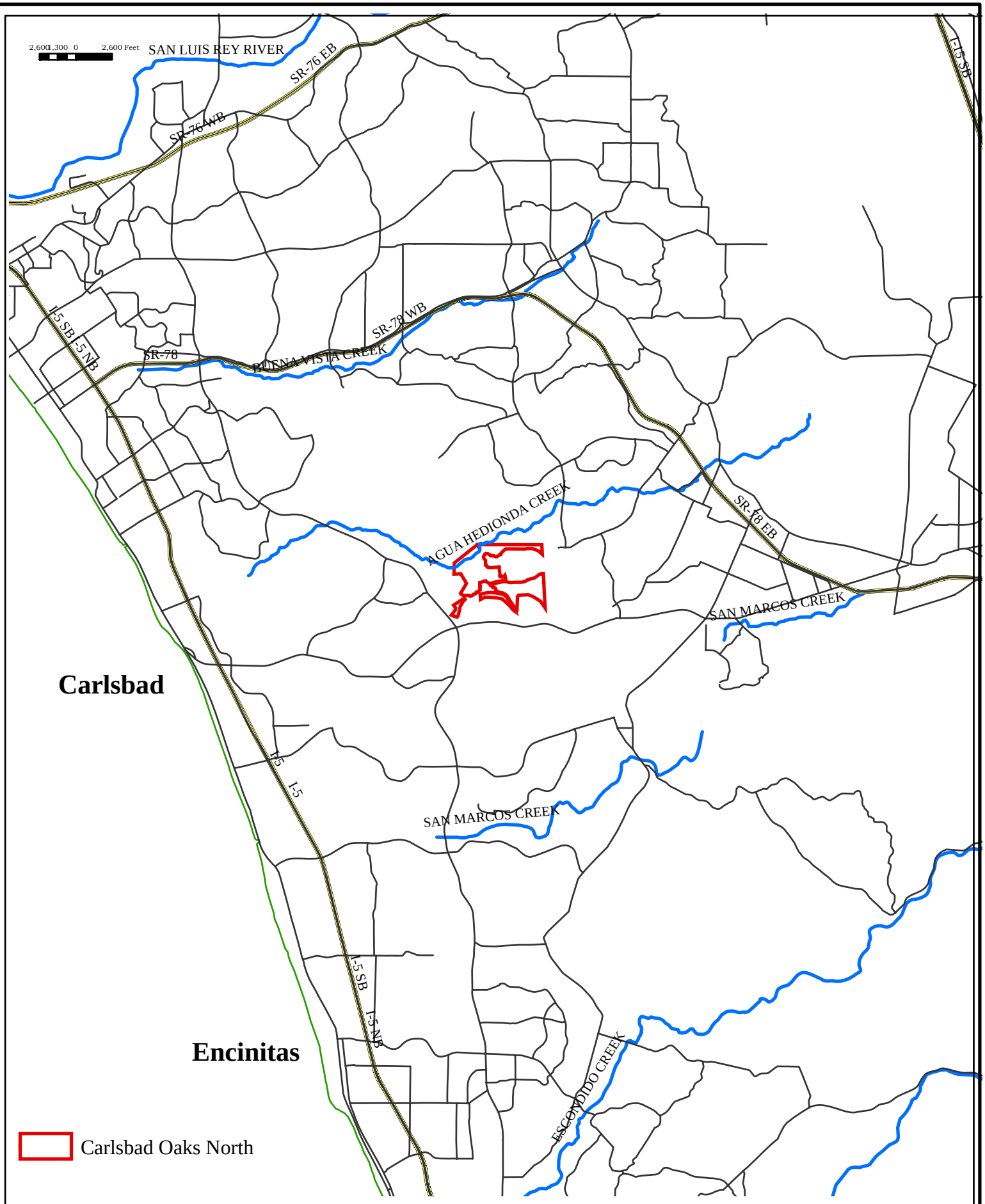


Figure 1
Preserve Vicinity
Carlsbad Oaks North Habitat Conservation Area - Carlsbad, CA

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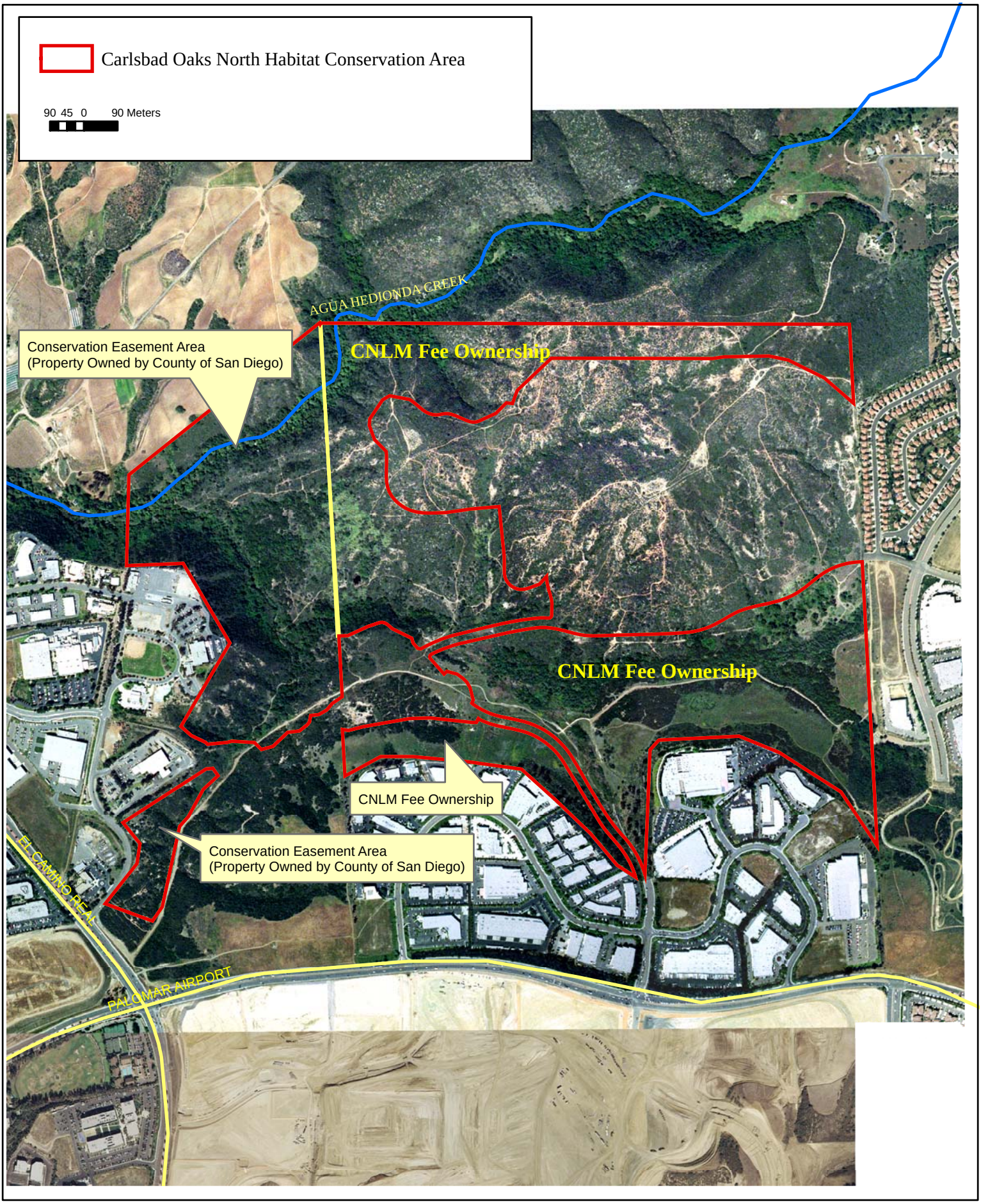

Figure 2
Preserve Location
Carlsbad Oaks North Habitat Conservation Area - Carlsbad, CA

Center for Natural Lands Management

2006-2007 CNLM Activity Summary

- We supervised the installation of 200 feet of chain link fencing along the western margin of the Preserve near the Safety Center, and 2900 feet of three-strand smooth-wire fencing along some northwestern and southern boundaries.
- We installed over 30 signs along the Preserve boundaries
- We photographed at least two mule deer (*Odocoileus hemionus*) using the Preserve along La Mirada Creek, and noted sign of deer usage in the hillside wetland area formerly dominated by pampas grass (*Cortaderia selloana*)
- We incidentally noted several herpetofauna and bird species while conducting other activities, including a nesting pair of northern harriers (*Circus cyaneus*) and a Cooper's hawk (*Accipiter cooperi*)
- We mapped two pair and one single coastal California gnatcatcher (*Polioptila californica californica*) male
- We censused and assessed the vegetative cover by species within the San Diego thornmint (*Acanthomintha ilicifolia*) population
- We censused and mapped a portion of the summer holly (*Comarostaphylis diversifolia*) and scrub oak (*Quercus dumosa*) populations on the Preserve
- We conducted regular patrol, site enforcement and trash pickup to protect the Preserve
- We supervised the chemical control of several nonnative plant populations including pampas grass (*Cortaderia selloana*), artichoke thistle (*Cynara cardunculus*), and eucalyptus (*Eucalyptus* spp.)
- We chemically treated several populations of weeds throughout the preserve, including artichoke thistle, fountain grass (*Pennisetum setaceum*), castor bean (*Ricinus communis*), pampas, fennel (*Foeniculum vulgare*), knobcone pine (*Pinus attenuata*), and non-native yucca (*Yucca* sp.)
- We took a proactive approach towards documenting the extent and potential long-term effects of the Vista "Raceway" sewage spill
- We supervised and personally installed several thousand feet of erosion control materials and re-vegetation along recently constructed illegal trails on the western margins of the Preserve
- We evicted persons from, and cleaned up after, three homeless encampments
- We met with adjacent business representatives to discuss trash deposition and landscaping issues taking place along Preserve edges
- We patrolled the Preserve regularly, picking up trash, removing weeds, and looking for other potential problems

II. Capital Improvements

The entire area has been used illegally for many years by mountain bikers, who not only created jumps, bridges, and many miles of trails, but also posted the site on web pages, and even conducted training exercises on the property (bikers called this area "Flightline"). The bikers were disappointed when the Carlsbad Oaks North development commenced, which resulted in a loss of much of their biking routes. As a result, some

bikers started to create new biking routes late in 2005 to early 2006 that started at the Safety Center and went down hill to the main valley. All new trail activity was within the County-owned portions of the preserve. They created two routes totaling about one mile of new mountain biking trail which connected into existing routes (Figure 3).

The Center, the County of San Diego, and Techbilt met as soon as we took over management to discuss how to deal with this issue. The CE prohibits any recreational activity. As a result of these meetings Techbilt installed about two hundred feet of chain-link fencing near the Safety Center to block access from this point. CNLM and the County posted the site "No Trespassing" and we started notifying bikers of the new rules.

Continued usage of the "Flightline" trail by vandals and mountain bikers lead the Center to construct two small lengths of 3-strand smooth wire fencing along the lower section of the Safety Center trail. At this time (October, 2007), most biking activity has ceased.

Twenty-one hundred feet of smooth wire fencing was also constructed along a portion of the northwestern boundary, adjacent to the private property in agricultural usage, and 800 feet were constructed along Orion Avenue, along the edges of the southwestern portion of the County CE. Approximately 31 signs were posted along all edges of the property. More signage is expected this coming year, since Faraday Avenue and El Fuerte have recently been opened to vehicular traffic, and new construction along the northeast portions of the property will necessitate further signage once nearing completion.

III. Biological Surveys

The Center performed the first set of biological surveys in spring 2006. The HMP (Tierra Data, 2005) outlines the goals of biological monitoring at the Preserve. The general goals of the monitoring activities at the preserve are to: 1) collect baseline data and 2) begin to develop population trend data on individual species within the preserve for certain taxonomic groups and the vegetation community.

Biological surveys are described below by the following categories: reptiles and amphibians, mammal, birds, plants and vegetation communities. A discussion of the biological surveys completed during the 2006-2007 fiscal year are described below under each appropriate category.

1. Reptiles and Amphibians Reptiles and amphibians were noted anecdotally during surveys for other taxa, and during regular patrols and maintenance activities. Species detected during the year include western fence lizards (*Sceloporus occidentalis*) and side-blotched lizards (*Uta stansburiana*).

2. Mammals Mammal monitoring activities were first undertaken for this Preserve in March of 2007 using wildlife cameras (Figure 4). Our goal is to understand and study trends in wildlife movement at "pinch point" locations and potential movement corridor

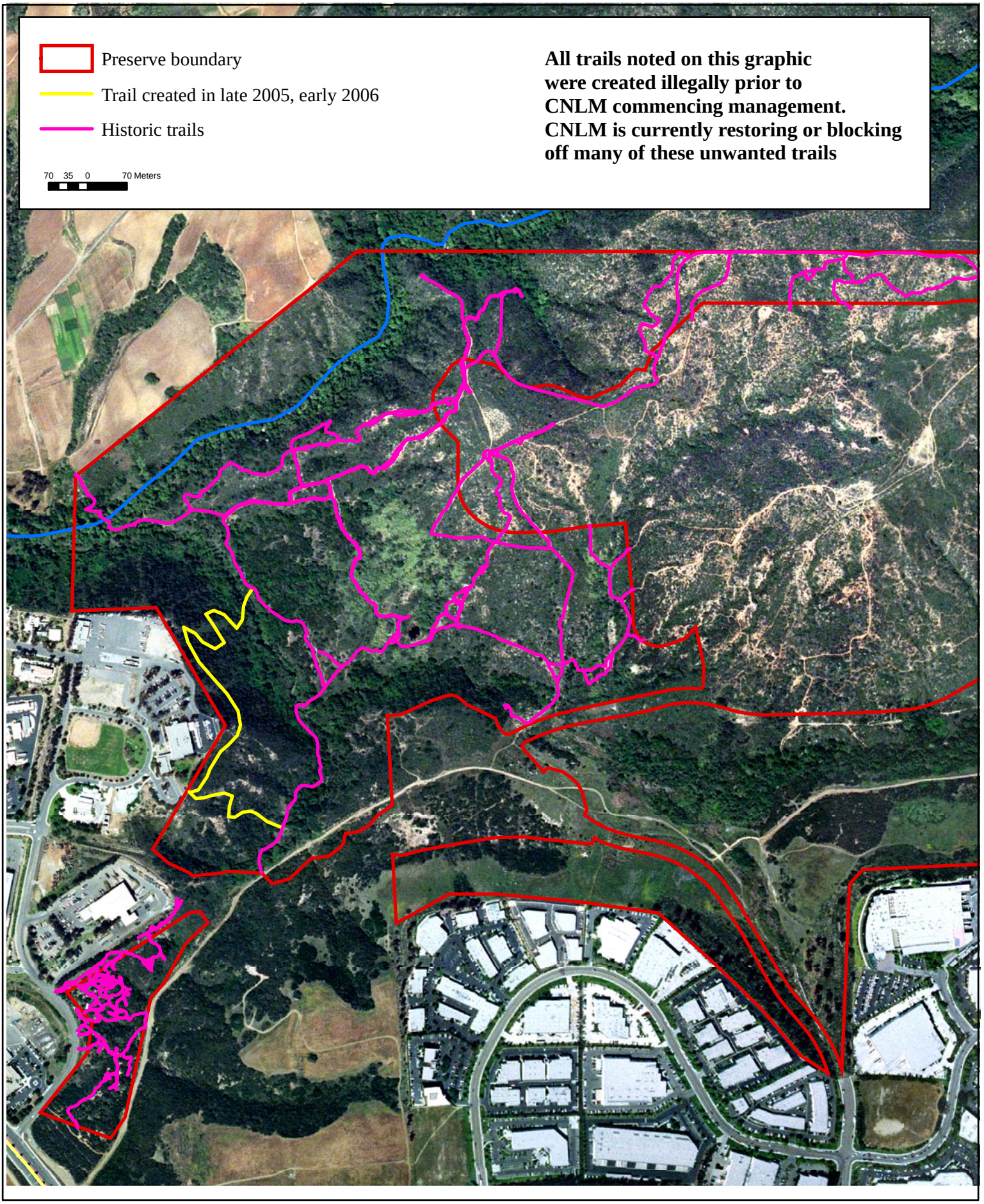

Figure 3
Current trail locations
Carlsbad Oaks North Habitat Conservation Area - Carlsbad, CA

Center for Natural Lands Management

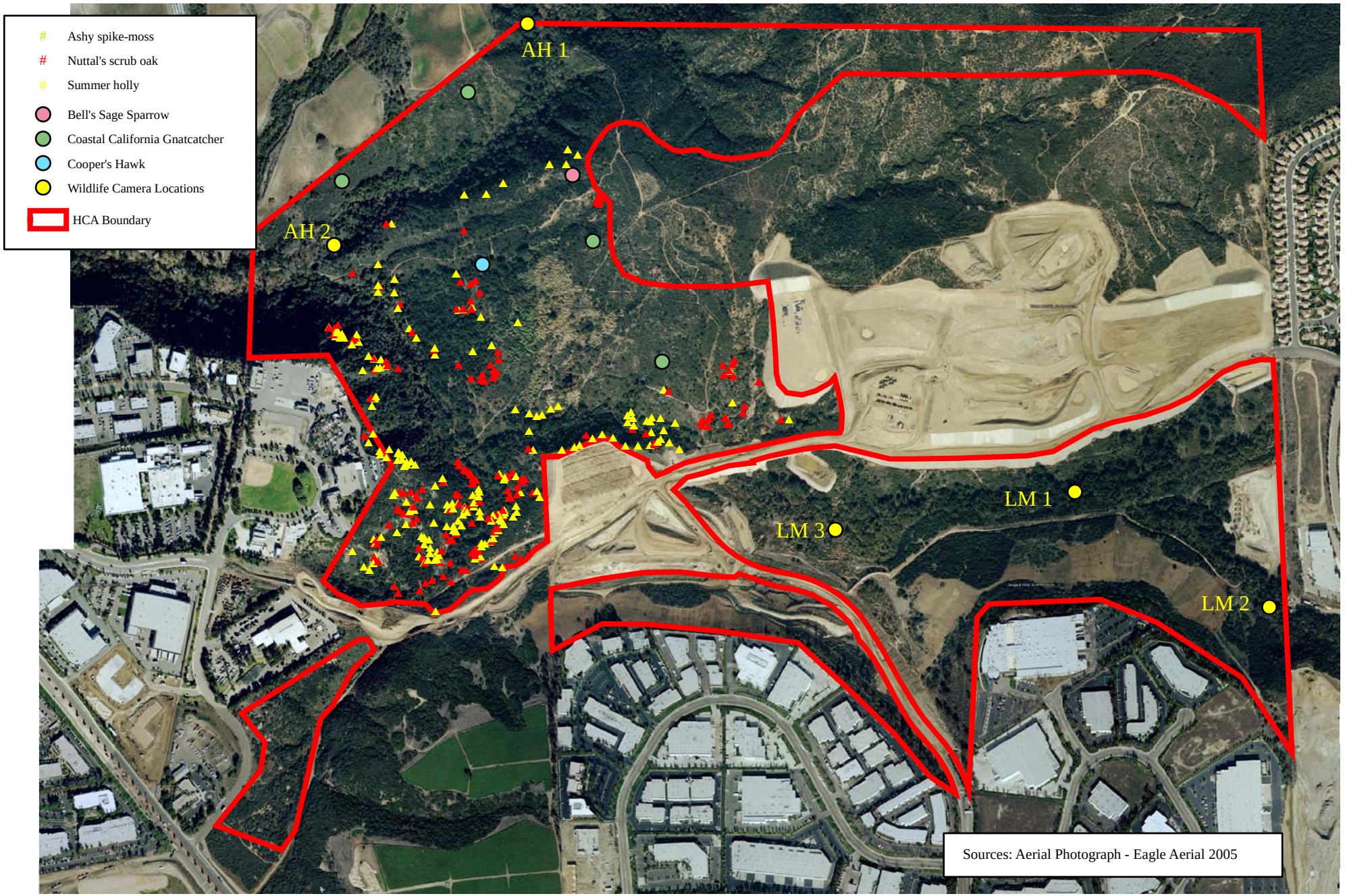

Figure 4
Sensitive Species Locations
Carlsbad Oaks North Habitat Conservation Area - Carlsbad, CA

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locations within the HCA. The Center wishes to understand general trends in species movement throughout the Preserve, and wants to know whether corridors (such as the wildlife crossing under Faraday Avenue) are being used. With further information about animal usage patterns, we will be more able to focus our efforts on discouraging public usage in these animal movement and foraging areas, as per the PMP (Tierra Data, 2005). Additionally, the MHCP Management and Monitoring Plan (MHCP, 2003) identifies several areas outside this Preserve which are important in maintaining animal linkage, and the hope is that by identifying potential corridors along the Preserve edges, these data can be of use to public agencies in future planning and monitoring outside of the Preserve.

We used a Cuddeback® Digital Scouting Camera, which utilizes a motion sensor device, and a flash for nighttime photos. The Cuddeback cameras record date and time of the movement taken by a picture, allowing us to estimate movement in any given month. Three sections of both major streams crossing the property were monitored during this management year. Only one location yielded photos during this report period, this being along the middle reach of La Miranda Creek (LM 3, Figure 4), and this location resulted in at least two mule deer on two separate dates. Signs of usage (pellets and tracks) are abundant along the middle section of La Miranda Creek, and throughout the wetland along the hillside north and east of where La Mirada Creek flows into Agua Hedionda Creek. One wildlife camera was stolen some time between April and mid May, and a backup camera was used for the duration of the year.

The following list details the locations, dates, and surrounding habitat of each wildlife camera site.

- CNLM Reference # LM1 (June 19 – July 31) La Miranda Creek approximately midway between the Melrose crossing and the Faraday Avenue crossing. The camera was set up in coast live oak woodland (*Quercus agrifolia*) facing streamside.
-
- CNLM Reference # LM2 (July 31 – August 17) La Miranda Creek nearby Melrose Road culvert, along the Eastern edge of Preserve that connects the former Carlsbad Raceway property with this Preserve. The camera was placed within a mix of willow (*Salix* sp.) and coast live oak woodland facing downstream.

- CNLM Reference # LM3 (August 17 – August 31) La Miranda Creek approximately 300 meters southeast of the Faraday Avenue wildlife crossing tunnel. The camera was placed within a mix of willow and coast live oak woodland facing downstream. This is the location where pictures were taken of mule deer on two sequential days in August 2007.

- CNLM Reference # AH1 (March 14 – April 14) Agua Hedionda Creek along the northern edge of the Preserve, where the creek enters from the north. The camera was set to face the stream and was located in a dense over-story of coast live oak and sycamore (*Platinus racemosa*).

- CNLM Reference # AH2 (September 14 – September 28) Agua Hedionda Creek at the eastern-most edge of the Preserve. This site was baited with dog food, and was located in sycamore-willow woodland along a small ravine above the creek.

Other mammals observed during patrols included cottontail rabbit (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), and coyote (*Canis latrans*).

3. Birds Three raptor species were observed and mapped. These include the Northern Harrier, and a Cooper's hawk (both CDFG species of special concern), and the more common red tailed hawk (*Buteo jamaicensi*). A breeding pair of northern harriers is likely nesting inside the wetland near the center of the Preserve (Figure 4).

USFWS protocol surveys for coastal California gnatcatchers were conducted during the months of March and April on three separate days (Table 1). Survey procedure followed the USFWS accepted protocol for conducting gnatcatcher surveys. Table 1 outlines survey dates, times, and weather conditions. Surveys were conducted by Ms. Jessica Vinje who holds an independent USFWS Section 10a "take" permit (Individual permit # 094318-0) authorizing for such surveys. Two pair and one single male gnatcatcher were observed by CNLM during these surveys (Figure 4). One other individual was observed, but its sex was unknown.

Table 1. Survey dates, times and weather conditions.

Date	Time	Weather	Type of Survey
March 20, 2007	7:30 -11:20 am	60 F; wind 0.7 mph; clear and sunny	CAGN
April 11, 2007	7:15 -11:00 am	62 F; wind 1.4 mph; sunny	CAGN
April 18, 2007	7:00 -9:00 am	55 F; wind 0.7 mph; cloudy	CAGN

4. Plants and Vegetation Communities

San Diego Thornmint On March 28, 2007 the San Diego thornmint population was visited to check for germination. One individual was in flower, and many seedlings were observed. The population was again visited on 3 April, and 49 plants were in flower, many others had yet to flower. The final count, which likely includes many plants counted on April 3, took place on April 11. This count included 157 plants in flower, and 53 plants that were either going to flower, or were wilting and not going to flower. This was a direct count, and not an estimation. Plants were generally of a very small stature (most less than 3 inches in height), and largely un-branched.

On April 30 a comprehensive cover estimation procedure was devised and carried out that involved the use of ½ by 1 meter subplots. A rectangular boundary was permanently marked outside of the entire population by placing 4 pieces of rebar. Five subplots were placed in stratified random locations along meter tape that was set up running lengthwise from one to ten meters. The plot locations were stratified to ensure random placement in at least one of each area of the rectangle. A random number table was used to determine

which quadrant of the short axis to sample from, and which distance along the long axis to sample from in each case. Additionally, this random number table was used to determine which of the three 3 x 3 meter squares would receive two subplot readings. The side of the transect tape to place the subplot was determined using the flip of a coin. Subplots were constructed of pvc and thin wire at 1 dm intervals wound through either side of the subplot. This accounted for 36 readings per subplot, for a total of 180 point-intercept readings. Care was taken to avoid standing or kneeling in areas immediately adjacent to San Diego thornmint. Standing cover was estimated as any plant alive during the current season being directly under where the two wire segments crossed. Ground cover was estimated in the same manner, but consisted of either dead matter that was lying on the ground, or bare ground.

Table 2 (below) only includes those species which were present below the cross-wires, and Table 3 indicates the species present inside the entire plot, and their relative frequency out of the 5 total sub-plot readings.

Table 2. Percent cover of native and exotic plant species in the San Diego thornmint population

Percent standing cover from subplot point intercept estimates, April 30, 2007					
Native			Exotic	Ground cover	
Acanthomintha ilicifolia	*Apiastrum angustifolium*	*Deinandra fasciculata*	*Centaurea melitensis*	Bare ground	litter
0.55%	1.67%	1.11%	2.78%	73.33%	26.67%
Total	3.33%		2.78%	100%	

Table 3. Frequency of species present out of five total sub-plots

	Frequency within plots by species Species	Frequency
Native	***Acanthomintha ilicifolia***	3
	Apiastrum angustifolium	4
	Convolvulus simulans	3
	Deinandra fasciculatum	3
	Eriogonum fasciculatum	1
	Lepidium sp.	1
	Plantago erecta	1
Exotic	*Anagalis arvensis*	1
	Bromus hordeaceus	1
	Bromus madritensis	2
	Centaurea melitensis	5
	Erodium cicutarium	1

The rainfall this management year was nearly a record low amount. It was no surprise, therefore, that the modal thornmint height was only an estimated 3 inches, and there was little branching. The height and cover of the exotic tocalote (*Centaurea melitensis*) was likewise lower than it would've been during a more typical wet season, with most

individuals non-branched and producing inflorescences within inches of the basal rosette. It will be interesting to evaluate and compare the cover in future management seasons. The purpose of the yearly assessments is to inform management decisions, such as potentially trimming tocalote heads prior to maturation. While this may appear to be a universally accepted population maintenance step, the Center will first investigate the yearly variations in thornmint counts and cover, and compare these parameters with non-native cover. It may be advisable to weed whip seed heads as they occur above the thornmint inflorescences, since this may not directly effect the success of seed-set, but this should only occur following habitat assessments.

Thread-leaved brodiaea Surveys for thread-leaved brodiaea (*Brodiaea filifolia*) were scheduled to occur this year. No flowering individuals were found, although several potential members of this species were found in the vegetative state nearby where previously mapped by Merkel and Associates, in 2001. Two sites within the HCA are known to be occupied by this species, and both will be surveyed for vegetative growth following winter rains, and both vegetative and flowering plants will be counted on two separate occasions in 2008.

Other Sensitive Plant Species During the summer of this year, over 190 summer holly, and 161 scrub oak were censused and mapped Figure 4. This mapping and censusing effort is only partially completed, however. The remainder will be completed in the summer of 2008.

IV. Habitat Maintenance and Restoration

Habitat restoration and maintenance goals for the Preserve include erosion control and removing nonnative plants from the preserve. For the most part, the Preserve is in great condition and has good native coverage.

City of Vista "Raceway" Sewage Spill

A forced main sewage line that runs north-south along the new Faraday Avenue near Melrose Avenue ruptured sometime in the night on either April 2 or April 3, 2007. This rupture wasn't noticed until approximately 7:45 AM on April 3 (Appendix A). The Center wasn't made aware of this spill until mid-morning of April 3. Center employees visited the site on the afternoon of April 3, and on subsequent dates in order to evaluate the extent of spillage along the watercourses. Most of the sewage was contained within the wetland creation site at the eastern edge of the Preserve. However, CNLM noticed that sewage had travelled down the entire length of La Mirada Creek to its confluence with Agua Hedionda Creek, near the Northwestern corner of the Preserve. This flow was interrupted by about noon of April 3, once Techbilt and the City of Vista had finished constructing earthen dams along the western margins of the wetland creation site.

The City of Vista Press Release (April 12) estimated that 30,000 gallons were released downstream past the wetland creation site, and that 203,000 gallons were spilled in total (Appendix A). Crews accidentally re-opened the rupture on April 6, and again filled the

wetland creation site with sewage. On this occasion, however, no sewage was spilled into the La Mirada drainage. Sewage was pumped out of the wetland creation site by April 12. CNLM Preserve Manager, Patrick McConnell, traveled the length of La Mirada Creek on the 12th, and noted that the water clarity had already achieved levels present previous to the spill.

During the summer, a series of photo-points were set-up and taken that run the length of the Preserve, from where La Mirada Creek enters the Preserve, through the wetland creation site, the length of both La Mirada and Agua Hedionda Creeks, and the small drainages that feed into La Mirada Creek from the south. The hope is that if the oak-willow canopy begins to show signs of disease or death along the course where the sewage spill travelled, that comparative photos will enable the Center to accurately ascribe mitigation responsibilities to the City of Vista.

Trail rehabilitation During the winter of 2006, several thousand feet of the illegal trails that were created from the Safety Center, and many of the other existing trails, were blocked with vegetation, sandbagged, lined with straw wattles, and in some areas planted with native vegetation. This work was completed by Techbilt and CNLM.

Weed treatments CNLM has an agreement with Techbilt that requires them to treat pampas and other weeds throughout the Preserve until February of 2009. The Center tracks the presence and location of weeds throughout the Preserve, and has been directing the treatment efforts through Techbilt's weed treatment contractor RECON Environmental, Inc. Many acres of areas infested with pampas grass have already been treated twice, and further treatments of these and other weeds have continued into the new management year. Techbilt is also maintaining its permit-required restoration areas.

The Preserve Manager repeatedly treated an area on the Southwest corner of the County CE portion of the property that was infested with approximately 300 artichoke thistle (*Cynara cardunculus*), 70 clumps of fountain grass (*Pennisetum setaceum*), 50 castor bean (*Ricinus communis*), four pampas, and 120 fennel (*Foeniculum vulgare*). Two knobcone pine (*Pinus attenuata*), and several non-native yucca (*Yucca* sp.) were removed along the La Mirada Cr. drainage. Tree tobacco was cut and stump-sprayed wherever found, and an estimated 60 individuals were treated in this manner.

V. Public Service

Public service activities have included patrolling the Preserve in an attempt to control dumping and associated vandalism, homeless encampments, and illegal access. In addition, public services include trash pick up and talking with neighboring businesses regarding trash along the Preserve edges. The Preserve was patrolled at least 3-4 times per month. During each visit the Preserve was surveyed for illegal activities, trash was picked up, and nonnative, invasive plants were killed.

Homeless Encampments Three homeless encampments were discovered during August, and later, an abandoned encampment that had caught fire was found as well. These

encampments were dismantled and several truck loads of trash were removed. This recent activity compelled the Center to include the Carlsbad Police Department in carrying out periodic sweeps on southern portions of the property. Our sweeps have resulted in little new encampment activity compared to our initial condition, which included at least 20 encampments.

Adjacent Business Outreach The Center met with John Hutcherson of Graphic Converting, Inc., a local business bordering the south side of the Preserve. Several dumpsters along the edges of their property release airborne plastics onto the edges of the Preserve, and Mr. Hutcherson gladly agreed to have these materials periodically cleaned up. More outreach will be pursued in the new management year concerning landscaper dumping, weeds outside our Preserve margins, trash, and trespass.

Trail Mapping Miles of trails were mapped during the spring using sub-meter hand-held GPS in an attempt to quantify the extent of historic and recent trails (Figure 3). This effort was taken to help the Center choose which, if any, trails could be set-aside as long-term public usage, which are redundant, or which are in need of re-vegetation and blockage. One long series of switch-back trails along the western margin of the property that was recently constructed had been blocked and re-vegetated in winter 2006, and thus was not mapped.

VI. Reporting

Reporting includes all data analysis, GIS and remote sensing, regional coordination, photo documentation activities, budget and financial status. Data that have been entered by CNLM include plant and animal survey data. CNLM has received and digitized (GIS) all CE and fee boundaries, and vegetation communities and sensitive species from previous biotechnical reports of the properties.

Annual report: This report represents the first annual report for the entire preserve. A brief annual letter report was completed for the Preserve activities that occurred during the partial year of work in 2006 (CNLM, 2006).

Annual work plan: An annual work plan for the next fiscal year will be provided to the wildlife agencies in December of 2008.

Budget/Financials: The total expenditures for 2006-2007 were $67,950 of a planned budget of $67,203. The total funds available as of April 30, 2007 are $1,211,491 of which $114,419 is Initial and Capital and $1,097,072 is Endowment.

VII. Summary and Discussion

Management of the Preserve continues to be successful by protecting it from human encroachment, building baseline biological data, and developing a better understanding of the Preserve and its regional context. Preserve Management in next year will continue in

a similar fashion as this year. A detailed work plan for the next fiscal year has been developed for this purpose.

VIII. References

CNLM 2006. Carlsbad Oaks North Habitat Conservation Area (S034) Annual Report. December 2006.

Multiple Habitat Conservation Program (MHCP). 2003. MHCP Biological Monitoring and Management Plan Volume III. California Department of Fish and Game, U.S. Fish and Wildlife Service, and Conservation Biology Institute. March 2003.

Tierra Data Inc. 2005. City of Carlsbad Preserve Management Plan (PMP) for Carlsbad Oaks North Habitat Conservation Area. January, 2005

IX. Appendices

Appendix A.

Documents relating to the Vista “Raceway” sewage spill

Memo

To: Tech Construction Corp.

From: Grant A. Clavier

CC: John Maashoff

Date: 4/10/07

Re: Sewer Spill

Fran,

On Tuesday April 3, 2007 at about 7:45 am, I was informed that there was a leak on the easement road at the east end of the Carlsbad Oaks North project. I proceeded to the leak site, and saw it was a sewer system that was leaking. The sewage was flowing into the Wetland restoration site. I contacted Fran Richmond and asked him if a crew from Cass Construction Inc. were available to construct an earthen dam to prevent the flow of sewage from leaving the restoration site. I then contacted the City of Vista to report the leak; this was at about 8:00 am. The crew from Cass started to construct the earthen dam shortly there after. The City of Vista's Sanitation Department arrived on site at approximately 8:30 am, and started to evaluate the situation. The decision was made by the City of Vista to dig additional trenches within the restoration area. At this time I needed to leave the site to conduct additional inspection on my other projects. When I returned I spoke with Alison Varner and she asked me who needed to contact the proper authorities, I told her it was the responsibility of the City of Vista to make contact. We talked to George with the city of Vista and he said that his office personnel were contacting the proper authorities. As I visited the site during the remainder of the day I observed the construction of a "Hi-Line" to by-pass the ruptured section of sewer main.

Please contact me if you have any questions at (760) 802-8783

Thank you,

Grant A. Clavier

Construction Inspector

date: April 6, 2007
to: Raul Guzman
organization: Techbilt Construction
from: Alison Varner
subject: City of Vista Sewer Spill at Carlsbad Oaks North
job number: CON-02
message:

The purpose of this memo is to document the events that I observed to take place on Tuesday, April 3, 2007 on the City of Vista sewer easement that runs adjacent to the eastern border of the Carlsbad Oaks North property.

I received a call from Fran Richmond (Techbilt) around 7:30 am on Tuesday (4/3/2007) informing me that there had been a sewer spill near the Carlsbad Oaks North project's wetland restoration site. I arrived onsite at approximately 8:30am. Techbilt, City of Vista, and City of Carlsbad representatives were already onsite.

When I arrived I observed that there was a broken pipe within the sewer easement at the southeastern edge of the wetland restoration site. The sewer water was gushing out of the pipe and then down the slope into the restoration site. It was then running through the restoration site to the northwestern corner, which is the low point, and out into open space and the La Mirada Creek. In an attempt to stop the sewer water from entering the creek, Techbilt had crews were already building an earthen dam in the northwestern corner of the restoration site. The dirt for the dam was being hauled in from the Carlsbad Oaks North construction site. Techbilt took about an hour to complete their dam. After I arrived onsite I observed City of Vista crews starting to dig within the restoration site using a backhoe to create another dam. Because I had been onsite when the restoration site had previously been graded I knew that the groundwater was only about 4-6 feet down in much of the site. While watching the City of Vista crews dig in the site I observed that the backhoe was bringing up water with the dirt that he was digging up.

Because the sewer water had entered the restoration site and La Mirada Creek, I spoke to Carlos Mendoza from the City of Vista to make sure that they had notified the appropriate agencies. He was not sure at the time and I later learned from George Salano with the City of Vista that their office had made the notifications. I also asked Carlos how long they would be digging within the restoration site because I was afraid that the sewer water was getting into the groundwater because of the City of Vista work within the site. Carlos said that they needed to dig in the restoration area to keep the water from going downstream and that he was not concerned about the groundwater at that time.

After the dams were built in the northwestern portion of the site the City of Vista crews began to dig up and pile dirt around the western edge of the site to dam up any low points.

Around 11:00 am crews from Baker started laying pipe for a highline. I left the site at approximately 1:15 pm and the highline had not yet been completed.

Please call me if you have any questions.

Alison Varner

Press Release

Agua Hedionda lagoon reopens

Contact: Jenny Peterson
Department: City Manager
Phone: 760/643-2708
Release Date: April 12, 2007

OFFICIALS ANNOUNCE NO SEWAGE REACHED THE LAGOON OR BEACH

VISTA – Precautionary closure signs posted last week at the Agua Hedionda Lagoon in Carlsbad by San Diego County health officials were removed late yesterday afternoon. The lagoon had been closed since Tuesday, April 3 following a sewer spill reported that morning near the City of Vista's raceway pump station. The spill was separate from the Buena Vista Lagoon sewer spill that took place on Sunday, April 1.

Precautionary measures were taken to close the lagoon because it was uncertain whether or not the 30,000 gallons of effluent that spilled into a tributary of the Agua Hedionda Creek actually made it to the lagoon. After extensive testing, county officials lifted the ban yesterday. No effluent had reached the lagoon itself. This was helped in part by the fact that the tributary creek was dry and the effluent was not transported to the lagoon by moving water.

The line that broke in this second spill is owned by the City of Vista, although it is located in the City of Carlsbad. Vista public works crews responded immediately to the report of the line failure, which was received around 7:50 am on April 3. Crews had the flows stopped from further downstream release by 9:30 am. Approximately 203,000 gallons were spilled in total, with 173,000 being captured in an adjacent containment area.

The Vista City Council approved an agreement at its Tuesday night meeting to proceed with emergency repair work on the line. The $150,000 repair will replace 850 feet of ductile iron pipe with high density polyethylene pipe – a much more durable material. The repair is expected to be completed by April 20.

This line was installed in 1988 and was only 19 years into its 50-year lifespan. The failed piece of pipe, along with the failed piece from the Buena Vista Lagoon spill, is being examined by forensic experts to help determine the cause of the failure.

For more information, please call Vista Communications Officer Jenny Peterson at (760) 643-2708.

Hi All,
Sorry I was out when this was sent and I didn't think to ask that the human health contact limits be put into the transmittal. I also failed to clarify the sample collection and compositing methods. For water sampling, a single sample was collected from the standing water in the trench (designated Sample ID - Water). Sample ID - High is a composite sample derived from three sediment samples taken from widely spaced high points (north, west, and southeast) in the basin that flooded with wastewater. Sample ID - Low was derived by sampling soils from the alkali crusts in the low points of the basin. Again, a composite sample was derived from three samples taken from the lowest depressions scattered on the site (north, west, and southeast).

Total coliform is 10,000 MPN/100ml , fecal coliform is 400 MPN/100ml, and enterococcus is 104 MPN/100ml. All of the samples were well below these concentrations with only the open water registering moderate levels on enterococcus.

As points of comparison of the data with typical values for the creek, wet weather storm sampling at the Agua Hedionda Creek mass loading stations near El Camino Real supports numbers in the thousands for all three factors during early season storm events (see appendicies to the IO provided).
Samples upstream of the spill at the recently monitored station AH-V01 to the south of the Raceway pump station had total coliform values of 2,000, 400, 1,200, and 2,800 for April 3, 5, 6, and 7, respectively. Fecal coliform for the same time period was <200, 100 400, and 1,700.
Enterococcus was 200, 200, 200, and 1,000 for the same period.

The water meter was installed by Vista on Friday last week. Today we removed the soil and filled the trenches cut for berms and wastewater recapture. spoke with Barry today and he indicated that he would coordinate with Recon on timelines to repair the irrigation system. If it can be repaired quickly, it would be best to turn the site over at this time to Recon. If delays would be anticipated, please let us know and M&A will repair the irrigation system in the basin and coordinate with Recon to get it operational ASAP.

Thanks,
Keith

CON 01

California Regional Water Quality Control Board

San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
(858) 467-2952 • Fax (858) 571-6972
http://www.waterboards.ca.gov/sandiego

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

April 17, 2007

In reply refer to:
NCRU:01-0764.02:ebecker

Rita Geldort
City Manager
City of Vista
600 Eucalyptus Av
Vista, CA 92084-6240

CERTIFIED MAIL
Registration Number
7006 3450 0003 7392 6898

Dear Ms. Goldert:

INVESTIGATIVE ORDER NO. R9-2007-0074, DISCHARGE OF UNTREATED SEWAGE INTO AGUA HEDIONDA CREEK, WITHIN THE CITY OF VISTA, SAN DIEGO COUNTY

Enclosed is Investigative Order No. R9-2007-0074 (Order) of the California Regional Water Quality Control Board, San Diego Region (Regional Board) concerning the discharge of over 203,000 gallons of untreated sewage from the pipeline owned by the City of Vista into a tributary of Agua Hedionda Creek. This Order is issued pursuant to California Water Code (CWC) sections 13267 and directs the City to submit a technical report **by May 14, 2007** providing information on the sanitary sewage overflow.

Please note the requirements contained within the Order and note that all technical reports submitted to the Regional Board shall be accompanied by the certification, under penalty of law, that the information is true, accurate, and complete.

Failure to meet the requirements may subject you to further enforcement action by the Regional Board, including administrative civil liability pursuant to CWC sections 13268 and 13385.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

IT IS HEREBY ORDERED, that pursuant to section 13267 of the California Water Code, the City of Vista, shall conduct a technical investigation, and prepare and submit a technical report to the Regional Board **no later than May 14, 2007**. The technical report shall contain, but is not limited to, the following information:

1. A complete, detailed explanation of how and when the overflow from the sewer main was discovered. Include how personnel were alerted to the fluctuations in the flow.

2. A detailed report of the cause and/or causes of the overflow, including any testing or technical evaluation of the condition of the sewer main.

3. A detailed chronological description of all actions taken by the City to terminate the overflow, repair the failed pipeline, and mitigate its impacts. Also include an evaluation of the results of these actions.

4. A detailed report of the total overflow volume including how the City calculated the volume.

5. The date and extent of the most recent preventive maintenance and/or inspection (e.g., line cleaning, closed-circuit television inspection) that was performed on the sewer line and other structures involved in the sewer overflow. Also report on any other problems experienced with the relevant force main in the past and what actions, if any, that have been taken to correct such problems.

6. Copies of any relevant photographs and/or video taken during or after the sanitary sewer overflow. Photographs and/or video shall include appropriate identifying information, such as date taken, name of photographer/videographer, and textual summary of information being presented, as well as its relevance.

7. Measures the City has taken, or will take, to prevent and mitigate the impacts of future overflows from force mains or other sewer lines, particularly in ecologically sensitive areas. This could include such tasks as monitoring of force main flows, increased monitoring frequency of sewer lines in sensitive areas, use of additional equipment to recover sewage overflows, etc.

8. All water quality data collected as part of monitoring of the wetland mitigation area, Agua Hedionda Creek and Agua Hedionda Lagoon after the overflow. Identify sampling locations, methods and circumstances.

9. A discussion of impacts on animal and plant communities, and the overall ecosystem in the wetland mitigation area, Agua Hedionda Creek and its tributary, and Agua Hedionda Lagoon. Please identify all species that have been affected and describe all biological monitoring conducted.

10. A report on all other short and long term efforts resulting from the overflow including, but not limited to, impacts on public health and the environment. Explain how these conclusions were reached and what steps the City has taken, or will take, to mitigate these impacts.

11. Any other pertinent information that will assist my staff in evaluating the discharge.

All information provided to the Regional Board shall include the following signed certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

JOHN H. ROBERTUS
Executive Officer

4/16/07
Date

JHR:rwm:es5

Center for Natural Lands Management
A non-profit organization for the protection and management of natural resources

215 West Ash Street
Fallbrook, CA 92028-2904
Phone: 760 731.7790
Fax: 760 731.7791
www.cnlm.org

July 12, 2007

Marci Killian, City Clerk
Vista City Hall
600 Eucalyptus Avenue, Building L
Vista, CA 92084-6240

CLAIM REGARDING SEWAGE SPILL
AT MELROSE PUMP STATION

Dear Ms. Killan:

I am writing you concerning the sewage spill from the sewer main at the Melrose (Raceway Basin) Pump Station located at 2685 South Melrose Drive in the City of Carlsbad that occurred on or about April 2 and 3, 2007. The City of Vista ("City") owns and operated the pump station and sewer main.

The Center for Natural Lands Management ("Center") has real property interests (both in fee and as the grantee of a conservation easement) that were damaged as a result of the spill. The amount of such damage cannot be defined at this time, but may be substantial.

The Center appreciates the City's proactive response to the sewage spill. We intend to work with the City, Techbilt Construction Corporation, and other parties to ensure that our property is cleaned up, remediated, and monitored over time.

A "Claim for Damages to Person or Property" form is enclosed.

Should you have any questions, please let us know.

Sincerely,

Sherry Teresa
Executive Director

Enclosure

Xc: Darold Pieper, Esquire, City Attorney, City of Vista
Martin Grover, Esquire, Assistant City Attorney, City of Vista
David A. Monroe, Esq., CNLM
Markus Spiegelberg, Area Manager, CNLM
Donald A. English, Esquire, Counsel to Techbilt Construction Corp.

Rise early, stay late and take care of the land.

City of Vista
600 Eucalyptus Ave
Vista CA 92084

CLAIM FOR DAMAGES TO PERSON OR PROPERTY

INSTRUCTIONS

1. Claims for injury, death to person or personal property must be filed not later than six (6) months after the occurrence. (Gov. Code Sec. 911.2)
2. Claims for damages to real property (land, structures or crops) must be filed not later than one (1) year from date of occurrence. (Gov. Code Sec. 911.2)
3. Read the entire Claim Form before filing. Claim can be mailed or filed in person. No faxes will be accepted.
4. See Page 2 for diagram upon which to locate place of accident.
5. This Claim Form must be dated and signed at the bottom.
6. Attach separate sheets, if necessary, to give full details. (Sign each separate sheet)
7. Claim Form must be filed with the City Clerk. (Gov. Code Sec. 915a)

To: The City Clerk
City of Vista, California

I, the undersigned, hereby present the following claim to the City of Vista in accordance with the laws of the State of California.

1. Name of Claimant: *CENTER FOR NATURAL LANDS MANAGEMENT*
Address: *215 West Ash Street, Fallbrook, CA 92028-2904*
City: *Fallbrook* State: *CA* Zip Code: *92028-2904*
Phone No. (day) 760-731-7790

2. Name and address to which person presenting claim desires notices to be sent: *David A. Monroe, Esq.*
215 W. Ash Street
Fallbrook, CA 92028-2904

3. Occurrence or transaction which gives rise to claim: Date: *April 2-3, 2007*
Place: *Pump station and sewer main, 2685 S. Melrose Drive, Carlsbad, CA*

Specify the particular act or omission you claim caused the damage or injury. Include a statement of how and wherein the City or its employees were at fault:

The dischargers sanitary sewer system and sewer main are owned and operated by City of Vista. The dischargers spilled sewage into Agua Hedionda Creek.

4. Full description of the circumstances involved in the act or omission referred to in Paragraph 3 above, out of which the alleged damage or injury arose:

The City retained spilled sewage in a wetland mitigation area owned by the Center for Natural Lands

Management.

5. General description of injury, damage or loss (so far as known as of the date of this claim).

Contamination of wetlands mitigation area, riparian habitat: incident immediate and ongoing damage to protected habitat "Conservation Values" (as that term is defined in a conservation easement).

6. Name or names of City employee or employees causing injury, damage or loss if known. *City-owned and maintained pipeline*

A. Amount claimed as of date of claim: *Cannot be estimated until short- and long-term natural damages assessments are performed, may be substantial.*

B. Estimated amount of any prospective injury, damage or loss: *Unknown at this time due ongoing damage.*

C. Total amount claimed: *Unknown*
please attach all receipts and/or estimates for backup

D. Break down of computation of the amount claimed:

7. Name and address of witnesses, doctors, hospitals, etc.

	NAME	ADDRESS	PHONE
A.			
B.			

8. Any additional information that may be helpful in considering this claim:
(attach additional sheets if necessary)

I am the Executive Directory of the organization named in the above claim. I have completed, or have caused to be completed, this claim form. The amounts or value of damages claimed above are the direct and actual damages estimated to have been incurred and will be incurred as a result of the incident referred to in this claim form. All of the information I have provided is true and correct. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: July 13, 2007 Place Where Executed: Fallbrook, California

Sherry Teresa, Executive Director
Center for Natural Lands Management

Signature of Claimant